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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10 HANFORD PROJECT OFFICE

712 Swift Boulevard, Suite 5 Richland, Washington 99352

September 25, 2003

Mr. Paul J. Valcich U.S. Department of Energy PO Box 550, A6-39 Richland, WA 99352

Re:

Steamlined Engineering Evaluation/Cost Analysis

Dear Mr. Valcich:

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SEP 3 0 2003

EDMC

The U.S. Environmental Protection Agency (EPA) has reviewed the preliminary draft document DOE/RL-2000-06, Rev. 0 (including Appendix A covering the specifics for the 224-B facility) entitled, "Engineering Evaluation/Cost Analysis for Central Plateau Streamlined Decommissioning Profile Facilities." Our comments on this document, which include issues raised by the Washington State Department of Ecology, are enclosed.

We recognize that recent discussions have led to changes in the proposed approach of a streamlined or presumptive engineering evaluation/cost analysis (EE/CA), including the decision to have a stand-alone EE/CA for 224-B. However, for consistency in documentation within the administrative record, we officially transmit our comments on the aforementioned draft document.

The EPA looks forward to working with the U.S. Department of Energy to forward the cause of decontamination and demolition of 200 Area facilities. If you have any questions, please call me at 509 376-8665.

Sincerely,

Craig Cameron

200 Area Project Manager

aig Cameron

Enclosure

cc:

Theresa Bergman, FHI

Rick Bond, Ecology

Greta Davis, Ecology

Administrative Record: 224-B Plutonium Concentration Facility

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EPA COMMENTS ON ENGINEERING EVALUATION COST ANALYSIS FOR CENTRAL PLATEAU STREAMLINED DECOMMISSION PROFILE FACILITIES DRAFT (DOE/RL-2000-06, REVISION 0, DRAFT)

#	Section; page	Comment Type/Comment
		General
G-1		It is understood that there are hundreds of buildings and we are not
]		going to have hundreds of EE/CAs or Action Memos. However,
•		the Streamlined Decommissioning Profile criteria are way too
		broad. You will end up having buildings like 224-B and 224-T
		with criticality concerns and a nuclear safety authorization basis
		covering them to no-never-mind buildings and everything in
		between. There needs to be more than one bin for these to be
<u>:</u>		sorted into using more specific criteria. Each streamlined (should
		really call it "presumptive" rather than streamlined) EE/CA needs
		to describe the other(s) so that the regulators and the public can put
		the removal actions into perspective (especially with regard to
ļ		cumulative impacts). There needs to be a process of discovery
		whereby new information can lead to switching a building to a
		different presumptive removal alternative if warranted. We wish
		to discuss ideas to approach the issues at an upcoming meeting.
G-2		The public involvement aspect of the plug-in approach in this plan
		is not acceptable. The public gets to comment the first time round,
		but after that, they have to go to the Administrative Record to view
		what buildings have been added since. Also, with the new rules on
		Official Use Only documents, the 224-B (Appendix A)
l		information will only be available for viewing by the public in the
		DOE Reading Room at WSU Tri-Cities.
G-3		The idea that leaving the slab is more conducive to the future
ſ		remediation is based on the assumption that the future remediation
		will involve capping. It is just as easy to argue that removing the
		entire foundation and 1 meter of soil is more conducive to remove,
		treat, dispose for the piping and contaminated soils beneath and
		around the building. There would be the added benefit of having
		workers with first-hand knowledge of the facility there to finish the
		below-grade structures rather than waiting years for a new crew
1		who may not know how to deal with possibly TRU-containing
		pipes.
		Another example would be for a mildly contaminated building that
		is isolated and it is believed that there is a good chance that with a
		little extra effort, the entire area can be cleaned up and removed as
}		a waste site.
G-4		The draft of the 224-B EE/CA developed by Bechtel Hanford
		Incorporated in 2000 (just before the Tri-Parties agreed that D & D
		of the facility was not as big a priority as concentrating on the river

#	Section; page	Comment Type/Comment
-		corridor cleanup) has their most intrusive alternative described as
	I	"Decontamination and Demolition (Including Building Foundation
		and Extending into Underlying Soil/Structures a Minimum of 1 M
		Below Surface)." The new EE/CA has the alternative read,
		"Decontamination and Decommissioning (Including Building
		Foundation and Underlying Soils/Structures to One Meter Below
		Surface)." Demolition would be more descriptive.
ĺ		Decommissioning doesn't have to mean removal. Need to revert
<u></u>		back to original title.
		Also EDA will require that an alternative by sentenced a bound of
		Also, EPA will require that an alternative be evaluated where the 1 meter zone would be like a skin around the entire below surface
		structure (foundation/basement) so that it is totally removed, not
		just 1 meter below grade. This supports evaluation of the widest
G-5		range of alternatives.
G-3		If this streamlined EE/CA is going to have 224-T as an appendix, it
		needs to reflect that Ecology can be the lead regulator on some of
		the facilities. It would also have to take into account the TSD
		portions of the facility. Would their closure be documented in a
		CERCLA document and then referenced in the Site-Wide Permit?
G- 6	Appendix A	Would the structure of the building include all connected piping?
G- 0	Appelluix A	The 224-B specific appendix indicates that the fact that the facility
		meets the SDP criteria was the reason for selecting the preferred
		alternative. The SDP criteria are too wide open to be used as a
	•	major deciding factor in whether a certain removal action
:		alternative should be applied to a particular facility. It is good that you are using CERCLA criteria to help select from the alternatives.
G-7		However, you fail to indicate this in the appendix. The detailed work plan for FY00-02 (first time around for 224-B)
U -7		assumed no craft bumping in the cost estimates. The present
		contractor at 233-S has had major issues with maintaining
		experienced D & D workers (especially with experience working
		in highly alpha-emitter contaminated environments). How
		confident is DOE that the workers will be able to transition in a
		timely and substantial way from PFP and the reactor ISS projects
		to the D & D of 224-B, or other central plateau facilities?
G-8		Don't allow the entire Appendix A to be For Official Use Only.
		Just split out the offending tables and diagrams, leaving costs and
		other specifics necessary for the public to comment on. Also,
		since you are removing the materials and securing the building
		during D & D, why can't the inventory information remain so the
		public can see why the building needs to be removed and what the
		scope of the project is? It isn't like anyone can get a hold of
		anything at the site after it has been sent to WIPP or wherever.
G-9		Does the Defense Nuclear Facilities Safety Board have a role in

#	Section; page	Comment Type/Comment
		the D & D of 224-B and other similar facilities?
G-10		Are you planning to append the Action Memo and the EE/CA each
		time a building meets the criteria and is plugged in?
G-11	Appendix A	The costs for these alternatives seem ridiculously expensive. The
	••	D & D of the 224-B building is not that different from the 224-U
		building in scope, yet the costs are about four times higher for
		demolition for 224-B than 224-U (as seen in the U-Plant Canyon
		Disposition Initiative FS and PP documents). According to an
		e-mail from Julie Robertson of Fluor Hanford dated, 9/4/2003,
		Fluor has developed revised figures for 224-B that are much less
		expensive. Why weren't these values included in this draft for
		review? The new estimates need to be in the revised document.
G-12		An EE/CA and AM that cover several buildings under one removal
		action will have costs that are additive. You will most certainly go
		over the \$75 million trigger for the EPA National Remedy Review
		Board that applies to DOE radiological sites. You will have to factor time in for this review. There is a review in November and
		one in the January/February time frame. The streamlined EE/CA
		document you have presented does not have enough detail and
		would not be well received. While the Board does not have veto
		power, it would be better to work to make whatever goes in front
		of them a supportable document.
		Specific
1	1.0; 1-1, last	The document in parenthesis is not in the references section.
_	sentence	
2	1.1; 1-1, second	Please delete "selection and cost."
	sentence	
3	1.1; 1-1, third	Don't see how you can issue a standard or generic Action Memo,
	sentence	there needs to be an Action Memo (AM) that is specific to a
		facility or group of facilities that are selected ahead of time so that
		there can be proper public involvement.
4	1.1; 1-1, last	How can the public comment on ahead of time? Should write a
	sentence	fifth point in the paragraph that states that an AM for each central
		plateau facility, or group of facilities, will be issued following an
	10 11 41 1	opportunity for public comment.
5	1.2; 1-1, third	Please replace "an increased potential for" with the statutory language "a substantial threat of."
	sentence	Please rewrite the bullets as follows:
6	1.3.2; 1-2	Allow the lead agency to take any appropriate removal
		action to respond to releases or substantial threats of
		releases to the environment that pose a threat to public
	•	health or welfare or the environment;
		Require the lead agency, as appropriate, to begin taking
		actions as soon as possible to respond to releases or
		substantial threats of release;
		Substantia in out of 1010000,

#	Section; page	Comment Type/Comment
		The third and fourth bullets are misleading and not necessary. You
		are reading more into 40 CFR 300.415 than there is. Please delete
		them.
7	1.3.3; 1-2, first	After "Policy" add "and the HFFACO." You may want to explain
	sentence	that you are referring to the TPA.
8	1.3.3; 1-2, first	Should be more specific than decommissioning. Your preferred
ļ	sentence	remedy involves demolition under a removal action.
9	1.3.3; 1-2, second	Concurrence is not just to be sought; it is a requirement of the
1	sentence	TPA. Need to add an "s" to "AM" since one AM will not cover all
1		of the various types of buildings. There are no plug-in AMs. You
		will have to batch the buildings if you want more than one to an AM.
10	1.3.3; 1-2, second	Please replace "including" with "and."
10	sentence	Flease replace including with and.
11	1.3.3; 1-2, second	How about work plans? See TPA Action Plan section 11.6work
	sentence	plans are required to be approved by EPA, including ERA work
		plans. Please revise the text accordingly.
12	1.3.4; 1-3	Who writes the responses to comment?
13	1.3.4; 1-3	What is the process for discovery that would lead to rejecting a
		facility from the SDP or the selected alternative once you start
		sampling? What is the decision logic about where the facility
		might end up if it turns out to require a different approach? How
		does the public or the regulators comment on this if it is not in the
:		document? This discovery could be made during early sampling,
		or it could be during sampling as you employ the selected
		alternative. This comment will be more pertinent when you narrow the SDP to a reasonable range of characteristics.
14	1.3.4; 1-3, last	Again, the State Department of Ecology (Ecology) will have a
	paragraph	much larger role as the lead regulator if 224-T is plugged into this
		streamlined EE/CA as planned. It is likely that the
		RCRA/CERCLA integration discussion will be required to have a
		great deal more detail for this document to be acceptable to
		Ecology. You are not going to get Ecology's concurrence before
		public comment?
15	1.3.4; 1-3, last	Please delete "documentation in the AR" and replace with
	paragraph, second	"issuance of the AM."
12	to the last sentence	Tribin and the state of the sta
16	1.4; 1-3, and section 1.6	This scope is wholly inadequate and biased toward Alternative 3.
	SCOTION 1.0	You don't know enough about the below grade structures to discount their risks. Also, you cannot presume the future remedial
		actions to be capping. While we don't expect the removal action
		to chase plumes all over, we should not rule out the benefits of
		removing the below grade structures and associated hazards.
17	1.5; 1-4, fourth	How few facilities with above grade structures would not meet the
	paragraph	SDP?

#	Section; page	Comment Type/Comment
18	1.5; 1-4, last	Again, the public will have to keep taking a peak at the EE/CA to
	paragraph	see what has been added prior to any chance to comment on the additions.
19	1.5; 1-4, last	Please delete this sentence. The plug-in approach is not
-	paragraph, fourth	acceptable. However, we can work out another way to efficiently
	sentence	make use of EE/CAs and AMs.
20	1.5.1; 1-4, second	Risk to workers within a facility is not a basis for CERCLA action.
	sentence	Please replace the last part of the sentence beginning with "by the
		presence" with the following, "if there is a release or a substantial threat of a release of a hazardous substance to the
		environment that poses a threat to the public health, welfare or the environment."
21	1.5.2; 1-5, first	Please insert "and type" after "presence."
21	paragraph, second	rease insert and type arter presence.
	sentence	
22	1.5.2; 1-5	The SDP is too wide open. For example, these same criteria could
	1.5.2,	apply to a mobile office building that has no business taking up
		valuable ERDF space.
23	1.5.2; 1-5, fifth	Are you saying that a facility containing waste consisting primarily
	bullet	of debris with some miscellaneous liquid and solid waste streams
	<u> </u>	is going to pose a substantial threat of a release into the
		environment?
24	1.5.2; 1-5, last	While there are no past practice milestones for the majority of
	bullet	these facilities, EPA is contemplating adding a new milestone
· · · · · · · · · · · · · · · · · · ·		series to cover such facilities.
25	1.5.3; 1-5	How can you apply a standard removal action to facilities that you
		do not have enough characterization information about (especially in the lower structures and piping? How can you do so without a
	1	contingency for discoveries that obviate the alternative selected?
26	1.5.3; 1-5, second	Please delete this sentence.
20	sentence	A 10050 Golde Mily Solitolico.
27	1.5.3; 1-5, third	Please replace "applied" with "available."
	sentence	
28	1.6; 1-6	Again, we haven't decided what constitutes the subsurface
		contamination that is to be left for the soil operable unit
	<u></u>	remediation folks.
29	1.6.1; 1-6, third to	This sentence is written such that it has a double meaning. Does it
	the last sentence	mean that there little TRU will be removed before the removal
	}	action or does it mean that there is very little TRU to remove
		period? Considering that 224-B has an authorization basis and
		criticality concerns, I would say the latter is not likely to be true.
		The TRU waste would require a certain level of characterization
		through non-destructive assay (NDA) to make sure the TRU and
		LLW go to the right disposal facilities. Has this been factored into
		the work scope and costs for 224-B?

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		You could clear up the sentence if you add "need be" after
		"inventory" and delete the second "is."
30	1.6.2; 1-6	See earlier comments on facilitation of future remedial actions.
31	1.6.2; 1-6, fourth	Please replace "this" with "the standard."
	sentence	
32	1.6.3; 1-7	The facilities like 224-B, with the exception of 233-S, are very
•		large and separated by many meters from their respective canyon
		buildings. The proposed cap for U-Plant has a water infiltration
		barrier portion that covers only the building and a few waste sites
		up against the side of the U-Plant. This barrier does not protect
		these large ancillary facilities from water infiltration. It only offers
		some protection against intrusion and exposure to direct radiation.
		So protection from the caps that may come out of the CDI program
		does not support an argument to leave facilities that might be plugged into this EE/CA as slab-on-grade.
33	1.6.3; 1-7	If additional capping occurred (such as lobes attached to the larger
		U-Plant cap) to provide water infiltration barriers, where would the
,		material come from and how would run-on and run-off be dealt
		with? While these questions may be out of the scope of this
		streamlined EE/CA, you are making assumptions and arguments
		based on larger issues that affect the selection of future remedial
		actions.
34	1.6.3; 1-7, seventh	In the sentence beginning, "Alternatives for facility" add
	sentence	"evaluated in this EE/CA" after "Alternatives."
35	2.0; 2-1	Please add the Future Site Uses Work Group and the Exposure
		Scenario Taskforce as other sources of guidance on land use.
36	2.0; 2-1, second	Inactive irradiated-fuel reprocessing facilities are not a land use.
	sentence	Even waste management is only a portion of a land use. The
		recent DOE/regulator/trustee workshop (Exposure Scenario
		Taskforce) on land use and recent Hanford Advisory Board advice
		do not point toward limiting land use to Hanford-related waste
		management activities. Other industrial activities also can play a
		role and the fewer caps; the more room there will be for such reuse.
37	2.1.2; 2-1	What about radioactive bunnies (or other critters that get into
3,	<u>4.1.4, 4-1</u>	buildings and contamination)? You should refer to the Central
		Plateau Ecological Evaluation when it becomes finalized.
38	2.1.3; 2-3	If removal action lends itself more to capping, then questions about
	·-·- , ·-· ·	source areas and potential impacts are truly more significant. It is
		difficult for the public to understand impacts when cleanup is
Ì		piecemealed.
39	2.2; 2-3	Please delete "selected for removal action under this EE/CA."
40	2.3; 2-3	TRU and TRU-mixed waste will likely result from activities at
	,	224-B. Also, nitric acid and nitric acid TRU are also distinct

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		possibilities based on lessons learned on the 233-S D & D project.
41	2.4; 2-4	It is all right to talk about worker risks, but you need to
	'	demonstrate external risks to justify a removal action. There must
		be a substantial threat of release to the environment that warrants
		action to protect human health and the environment. For 224-B,
		you may be able to support your case through use of information
		developed through hazard analyses necessary to conduct work
		under the nuclear safety authorization basis. You may also want to
		explain more about the consequences of a lack of robust
		ventilation.
42	2.4; 2-4, last	Please stay consistent and use "radionuclide" to describe the
	paragraph, first	contamination.
	sentence	
43	2.4; 2-4	What about subsurface risks and characterization? The amount of
		piping under these facilities and the distance from the potential
		capping remedy proposed for their canyon buildings strongly
		favors some kind of sampling to confirm if it's safe enough to
		leave slab (especially in light of uncertainties about future
4.4	2 0. 2 1 1 2 4 1 1 1 2 4	remediation and funding). Would prefer that you use the language from the statute. See
44	3.0; 3-1, last bullet	300.415 (e) — To the extent practicable, contribute to the efficient
		performance of any anticipated long-term remedial action with
		respect to the release concerned. Also see 300.415 (g) – ensure an
		orderly transition from removal to remedial response actions.
45	4.0; 4-1, first	Please add "and otherwise meet RAOs" onto the end of the
1.5	sentence	sentence.
46	4.0; 4-1, third	What do you mean by "media"? Why wouldn't the material, soils,
	paragraph	or "media" removed for recycle be subject to CERCLA and the
		CERCLA offsite rule? EPA has a responsibility to ensure that
		EPA is not creating a future CERCLA site wherever recycled
		material from a CERCLA cleanup is sent.
47	4.0; 4-1, last	Do we need to have them add the latest ROD Amendment for
	paragraph on page	ERDF?
48	4.0; 4-1, last	It should be noted, that even if you are allowed to remove waste
	paragraph	before the removal action, it will not be covered under CERCLA
40	10.40	and cannot go to ERDF.
49	4.0; 4-2, second	Where and when will the types of treatment be determined and
	paragraph	documented? In a work plan? In the AM? What document will the approved treatment plan be in? Please specify.
50	4.0.4.2. lost bullet	This is dependent on the effectiveness of solidification on the mix
50	4.0; 4-2, last bullet	of constituents.
51	4.0; 4-2, last two	Combine these sentences. You may want to indicate that the TRU
71	sentences on page	waste might be properly packaged at the D & D site and not need
	scincinces on page	to be packaged or repackaged at WRAP before being sent to
		WIPP. All waste shipping and disposal and D & D activities will
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#	Section; page	Comment Type/Comment
ļ		have to be scheduled in a primary document covering waste
	ĺ	management that is approved by the lead regulator. We expect to
		have something at least as good as the 233-S RAR language about
	40.4254	TRU shipment to WIPP.
52	4.0; 4-3, first	EPA does not consider them to be one single site. We will still use
	sentence	our offsite determination authority.
53	4.0; 4-3, third	By "non-CERCLA" do you mean RCRA? Are you certain the
	sentence	State is okay with managing waste under only substantive
F 4	40.42 61	requirements once the wastes are at these permitted facilities?
54	4.0; 4-3, fourth sentence	Again, "onsite" is not all of the facilities at Hanford.
55	4.0; 4-3, last	What do you mean when you say "if necessary"?
	sentence	
56	4.1; 4-3, fifth	The sentence beginning with "Barring" is at odds with the need
	sentence	for a substantial threat of release to the environment. Please
		replace "assumed" with "expected."
57	Footnote at bottom of 4-3	You do not explain how the criteria are met to treat them as one
58	4.2; 4-3 to 4-5	single site.
٥٧	4.2, 4-3 10 4-3	Please make sure you indicate that there would be some waste
		generated during the S & M activities covered by this alternative
		so that you support the part of your statement in section 5.1.4, page 5-13, that provides that Alternatives Two through Four generate
		waste.
59	4.2; 4-4; first	After "2043" please add, "for final facility decommissioning."
•	sentence	You should clarify what the long-range plan is for.
60	4.2; 4-4, third	What about potential seismic impacts?
	paragraph, third	
	sentence	
61	4.2; 4-4, fourth	Please add "risk of" after "increased." Again, you need to indicate
	paragraph, last	a threat of release to the environment.
	sentence	
62	4.2; 4-5	Costs - categories - range, The review of costs is still tough from
		public involvement standpoint because the public doesn't get a
		chance to comment on ahead of time on plugged in facilities. The
		costs would need to be in the AM, not sure you could get away
		with appending it without more chances for the public to comment.
		It may be possible to cover the ranges of costs for categories of
		buildings in the AM, but this still may be pushing it.
63	4.2; 4-5	Need to have surveillance and maintenance costs for the time
		period (or annual costs) of stabilization anticipated before the
		implementation of a remedial action. These would likely be
		different based on the choices of removal and remedial actions, but
		at least the fact that there will be some costs needs to be addressed.
64	4.3; 4-5, bullets	Why aren't there bullets for the activities under the other
		alternatives? Looks like your analyses are biased toward the

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		answer you want. Please explain for the reader with some follow
		on text how the first and third bullets relate. It looks like
		stabilizing contamination is at odds with removing hazardous
		substances.
65	4.3, 4-6, third	Please specify what types of things may be done to stabilize the
	paragraph, last	facility footprint.
	sentence	
66	4.3; 4-6	Don't forget that for both Alternatives 3 and 4, you may run into
		NDA or criticality issues, or authorization basis red tape. You will
		not be able to use cutting torches until 224-B is downgraded to
		radiological. There are also going to be risks of emissions during
		demolition because you will not be able to decontaminate or fix enough.
67	4.4; 4-7	Again, the 1-meter below requirement needs to stipulate that it
	, , , ,	would be below the foundation or structure, not the ground surface.
ĺ		If this is not the concept then clarify and justify.
68	4.4; 4-7, first	Please insert "and removal" after "demolition."
	sentence	
69	4.4; 4-7, last	Would the soils that might be removed for shoring purposes be
	paragraph	designated and sent to ERDF or put back in the hole?
70	4.4; 4-7, last	Alternative Four could easily be considered more protective since
	sentence	you are removing more contamination and safely disposing of it in
		ERDF.
71	5.0; 5-1, first	Please delete "CERCLA requires that" and capitalize "non-time-
	sentence	critical" to start the sentence. This is not an explicit CERCLA
70	511.52	requirement. Also replace "be" with "are."
72	5.1.1; 5-2, second to last sentence	It is not appropriate to assume that the amount of subsurface
	to last sentence	contamination is small. What does small mean, anyway? You have no characterization data to make such conclusions.
73	5.1.2; 5-2, first	Please note in the text that remedial actions must comply with
,,	paragraph	ARAR requirements in accordance with Section 121 (d) of
	paragraps.	CERCLA.
74	5.1.2; 5-2, last	Sentence beginning with "Furthermore," needs to have
	sentence	"CERCLA" added after "onsite."
75	5.1.2; 5-3, first	Please delete the last two sentences. The statement in the first
	paragraph	sentence is not true. It is only true to the extent practicable.
76	5.1.2; 5-3, second	Delete "potential."
	paragraph, first	
	sentence	
77	5.1.2; 5-3, second	Please delete "In certain situations" and replace with "As
	paragraph, second	appropriate."
	sentence	
78	5.1.2; 5-3, second	Delete the word "proposed."
	paragraph, third	
	sentence	

#	Section; page	Comment Type/Comment
79	5.1.2.1; 5-3, first	Do you spell out ACM somewhere earlier? Does it stand for
"	paragraph	asbestos contaminated material?
80	5.1.2.1; 5-3, second paragraph, third sentence	Delete "proposed as." The statement in the next paragraph, third sentence, about how the standards "would apply" is an example of a better approach.
81	5.1.2.1; 5-4, third paragraph, first sentence	Please add "that meets ERDF acceptance criteria" after "LLW."
82	5.1.2.1; 5-4, fourth paragraph, first sentence	Please add "and ERDF acceptance criteria" after "restrictions."
83	5.1.2.1; 5-4, fifth paragraph, first sentence	Please replace "disposal" with "treatment."
84	5.1.2.1; 5-4, fifth paragraph, second sentence	Please rewrite as the following: "ETF is a RCRA-permitted facility that is authorized to treat aqueous waste streams generated at the Hanford Site following treatment at ETF, the waste would be disposed of at a designated state-approved land disposal facility in accordance with all applicable requirements." Please note that if it is listed dangerous waste, it must be delisted or it can't go to SALDS.
85	5.1.2.1; 5-4	See earlier comments about bypassing WRAP if packaging and certification done properly. Also see comment about single site and offsite determinations.
86	5.1.2.1; 5-4, last paragraph	Again, you don't explain how you meet the criteria.
87	5.1.2.2; 5-5	Need to indicate that EPA will have to approve the air monitoring plan and revisions.
88	5.1.2.3; 5-5, second paragraph, second sentence	Don't you mean "site-specific health and safety plan?"
89	Table 5-1; 5-6	For the entry containing Dangerous/Mixed Waste Management, how about listing sections dealing with storage or treatment requirements?
90	Table 5-1; 5-7	What do you mean by final status?
91	Table 5-1; 5-9	In the Emissions of Hazardous Air Pollutants entry, third paragraph of the Requirements column, please delete the "are" between "that" and "would."
92	Table 5-1; 5-10	Please clarify the rationale for the Controls for New Sources of Toxic Air Pollutants (how the treatment technology part is involved).
93	Table 5-1	Let's discuss similarities and differences with the ARARs from 233-S.
94	5.1.3; 5-11, first	Please replace "an" with "a" and delete "unacceptable." There is a
	paragraph	statutory preference for permanence. However, the statute doesn't

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		speak in terms of acceptable or unacceptable risk.
95	5.1.3; 5-12, second paragraph, second sentence	Please add "more" in front of "permanent."
96	5.1.3; 5-12, second paragraph, fourth sentence	How will you verify the conceptual model that there is a "small" quantity of contaminants below the surface compared to above?
97	5.1.3; 5-12, second paragraph, fifth sentence	Please add "for the structure" onto the end of this sentence. You still have waste in the subsurface and waste removed will have to be managed elsewhere.
98	5.1.4; 5-12, first paragraph, first sentence	Please replace the "a" in front of "removal" with a "the." Also, please add "alternatives" onto the end of the sentence.
99	5.1.4; 5-12, second paragraph, first sentence	Where is the basis for the 10% figure for waste requiring treatment to meet various waste acceptance criteria?
100	5.2; 5-13, third paragraph, second sentence	If 233-S is any indication, you may be underestimating the difficulty of finding workers with experience in facilities highly contaminated with alpha-emitting radionuclides. This is especially true for workers with D & D experience. PFP workers will not be available for a few years, as they need to D & D that facility.
101	5.2; 5-14, second to last sentence in section	EPA does not necessarily agree with this conclusion. Your conclusion is dependent on a capping remedy and we may not support the selection of capping as the remedy. It could be said that removing the entire foundation would be more conducive to remove, treat and dispose.
102	5.4; 5-14, second paragraph, first sentence	Should add "or disposal" between "waste treatment" and "facilities."
103	5.4; 5-14, second paragraph	How can you assess cumulative impacts properly if you do not know how many buildings will eventually plug-in? Especially if you have to narrow the selection criteria and have several plug-in bins.
104	5.4; 5-15	Don't forget the larger picture. If you choose slab-on-grade, this lends itself better to a capping remedy (otherwise, why stop at slab-on-grade). Caps will require resources, too.
105	5.4; 5-15, last sentence	The excavation would be deeper if the foundation went deeper and this alternative really involves removing the whole foundation. If it does not, an alternative 5 should be created to look at taking out the whole foundation. It doesn't make much sense to stop at 1 meter below ground surface. It makes more sense to stop at 1 meter below the foundation (varying based on how deep the foundation goes).
106	6.0; 6-1	Of course there is little added benefit to only going 1 meter below the surface compared with slab-on-grade. The comparison you

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\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		should be making is with removing the entire underground
		structure and 1 meter below that. You should include such an
		alternative or expand Alternative 4 to include this entire scope.
107	6.0; 6-1, last	What kind of public participation is "appropriate"?
	sentence in section	
108	A.1.5.2; A-4, first	Don't you mean for the last "characteristics" to be "criteria"?
	paragraph	
109	A.1.5.2; indented	Somewhere you need to indicate where the nearest public receptor
	subsection	would be.
110	A.1.5.2; A-11, first	Should also refer to the Central Plateau Ecological Evaluation as a
	paragraph	source of ecological resource information. The current 200 Area
	' ' '	Ecological Data Quality Objectives work may eventually affect the
		way removal actions are performed.
111	A.1.5.2; A-11, last	Please realize that there may be nitric acid and it may be mixed
	paragraph	with TRU, as was the case with the 233-S facility.
112	Table A1-1; A-12	What data is this radionuclide ratio supported by?
113	Table A1-1; A-12	The text below this table indicates that the uncertainty is up to 1.5
	'	times the original reported values. Does this table report the
		original values or does it reflect the higher end to be more
		conservative? Which values will be used for calculating potential
		to emit, worker safety, or waste stream planning?
114	A.1.5.2; A-12	Where is the mention of nitric acid?
115	A.1.5.2; A-13, last	Media removed for recycle from a CERCLA removal action would
	paragraph, second	be subject to CERCLA authority. If you removed the material
	sentence	before the action using your AEA authority, that would be
		different.
116	A.1.5.2; A-14,	Waste may also be distinguished operationally by whether or not it
	second paragraph	is "soft waste" such as step off pad waste like PPE. You may want
		to consider whether or not it is advantageous to indicate this level
		of detail.
117	A.1.5.2; A-14,	Should add monitoring to list of activities at ERDF just to be
	second paragraph,	thorough.
	last sentence	
118	A.1.5.2; A-14, first	This is true as long as the mercury isn't hopelessly mixed into a
	bullet	matrix.
119	A.1.5.2; A-14, last	This is dependent on the effectiveness of the solidifying agent on
	bullet	the mix of constituents inside the aqueous solution. However, it
		has been successfully done on solutions coming from 233-S.
120	A.1.5.2; A-15, first	Need to add that these wastes being stored at CWC will be treated
	sentence continued	when a treatment is available and then disposed of.
	from previous page	
121	A.1.5.2; A-15,	Need to add the same language used in the 233-S RAR about TRU
	second paragraph,	being shipped to WIPP at least by the time cleanup is to be done in
	first sentence	the 200 Areas.
122	A.1.5.2; A-15,	EPA does not agree with this. We have the authority to continue to

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	second paragraph,	make offsite determinations and keep tighter control of waste
ì	second sentence	management issues and we will do so. These facilities will not be
		considered one singe site for the purposes of any CERCLA
		cleanup. Only certain sites (like ERDF) will meet this as approved
		by EPA and written into the Action Memo.
123	A.1.5.2; A-15, third	While the 224-B facility is not a key facility, similar facilities may
	indented paragraph	be rolled up into a new milestone series in the future. The 224-T
		facility would be subject to TSD provisions in the TPA and, of
<u></u>		course, State regulations.
124	A.1.5.2; A-16, first	Need to explain for the public why the facility qualifies for
	indented paragraph	decommissioning according to the policy.
125	A.1.5.3; A-16, last	How about filling Cell C with grout if you really are leaning
	sentence	towards a capping remedy?
126	A.4.1.1; A-17	Even though it seems obvious, you should add some more to this
		by explaining why the costs would be negligible for the public's
		benefit.
127	Table A4-1; A-17	Are these in year 2000 dollars?
128	Tables A4-3 and 4	The estimated volumes of each waste stream should be included,
		probably in parentheses after the waste stream in the "Waste
		Disposal" cell of the tables.
129	A.5?	Where is it?
130	A.6.0; A-19, last	Is 200-BP-6 the right operable unit? This sounds like one of the
ļ	sentence	operable units from the old geographic scheme (before the
<u> </u>		operable units were consolidated to 23 process-based units).
131	A.6.0; A-19, last	Alternative 4 does not preclude any remedial actions, either. You
	sentence	need to indicate this, even if it is in the discussion of Alternative 4.
		You have decided what you are going to do (Alternative 3) and are
İ		writing everything around that, rather than taking a decent look at
<u> </u>		the situation for each type of facility.
	24.24 15.54	Typo
T-1	2.4; 2-4, last	Missing a period.
	paragraph, first	
	sentence	Change "sheep" to "ship"
T-2	1.5; 1-4, first	Change "these" to "this."
}	paragraph, last	
<u></u>	sentence	To the life of the second seco
T-3	A.1.5.2; A-14,	Looks like there is an extra space or two between "operation" and "was."
	second paragraph,	was.
- A	fourth sentence	TY
T-4	5.1.2; 5-2, third	Have an extra period.
	sentence	